

Office of Environmental Management – Grand Junction



Moab UMTRA Project Transportation Security Plan

March 2009

Revision 1



U.S. Department
of Energy

Office of Environmental Management

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Transportation Security Plan**


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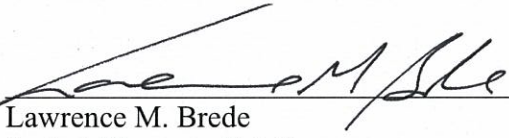
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Revision History

Revision No.	Date	Reason/Basis for Revision
0	January 2009	Initial issue.
1	March 2009	Corrected document number designation to reflect project-wide nature of document.

Table of Contents

Section	Page
Acronyms and Abbreviations	iv
1.0 Introduction.....	1
1.1 Purpose and Scope	1
1.2 Roles and Responsibilities	1
2.0 Requirements.....	2
2.1 General Security	2
2.1.1 Personnel Security	2
2.1.2 Facility Security.....	2
2.1.2.1 Access Badges	2
2.1.2.2 Residual Radioactive Material Storage.....	2
2.1.2.3 Security Incidents.....	3
2.2 Training.....	3
2.3 Risk Assessment	4
2.4 Transportation Operations	4
2.5 Enroute Transportation Security	5
2.6 Security Breaches	6
3.0 Records.....	6
4.0 References.....	6

Table

Table 1. Transportation Security Training Matrix	4
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Attachments

Attachment A. Security Action Plan Briefing Rail Carriers
Attachment B. Security Action Plan Briefing Truck Drivers
Attachment C. Certification of Transportation Security Plan

Acronyms and Abbreviations

CDL	Commercial Drivers License
CFR	Code of Federal Regulations
DOE	U.S. Department of Energy
DOE M	U.S. Department of Energy Manual
DOE O	U.S. Department of Energy Order
DOT	U.S. Department of Transportation
EM	Environmental Management
hazmat	hazardous materials
RAC	Remedial Action Contractor
RRM	Residual Radioactive Material
TAC	Technical Assistance Contractor
UMTRA	Uranium Mill Tailings Remedial Action

1.0 Introduction

1.1 Purpose and Scope

This *Transportation Security Plan* (DOE-EM/GJ1768) describes the security requirements to stage and transport residual radioactive material (RRM) for the Moab Uranium Mill Tailings Remedial Action (UMTRA) Project. This plan compliments the project *Transportation Plan* (DOE-EM/GJ1639). This plan addresses:

- Risk assessment and response to significant threats and vulnerabilities
- Safety and security of project personnel, facilities and equipment, materials, environment, and the general public
- Applicable federal, state, and local regulations
- Deterrence to theft of government property
- Training in general transportation security awareness
- Compliance with security requirements of the U.S. Department of Transportation (DOT) Special Permit DOT-SP 14283

This *Transportation Security Plan* applies to the Moab UMTRA Project Remedial Action Contractor (RAC) and its subcontractors who transport RRM in commerce, including line managers, supervisors, drivers, shipping and receiving personnel, operators, mechanics, and security personnel, and the Technical Assistance Contractor (TAC), which provides infrastructure and support services to the U.S. Department of Energy (DOE). For the purposes of this plan, shipping refers to the preparation of documentation for each RRM container, and transportation refers to the act of moving each container.

1.2 Roles and Responsibilities

The RAC operations organization is responsible for conducting RRM shipping activities and ensuring compliance with this plan. The requirements outlined in this plan are the responsibility of all project personnel involved in RRM transportation operations, including the RAC and subcontractors performing these duties. Project personnel involved in RRM transportation operations are listed below. Employees requiring hazardous materials (hazmat) training are indicated next to the position title.

- Transportation Manager
- Shipping Clerk
- RRM Truck Driver (hazmat trained employee)
- Union Pacific Railroad Company (Union Pacific) Train Operations personnel
- Radiological Controls Technician (hazmat trained employee)
- Security Guards
- Crane Operator (hazmat trained employee)
- Reach Stacker Operator (hazmat trained employee)
- Lidding Structure Operator (hazmat trained employee)
- Receiving Clerk

The RAC Operations Manager is the Transportation Manager responsible for handling the RRM shipments before they leave the Moab site and upon their arrival at the Crescent Junction

disposal site. Union Pacific is responsible for the rail shipments between the Moab and Crescent Junction sites. RRM transported via an over-the-road truck will be the responsibility of the trucking company.

2.0 Requirements

This plan is prepared as required by 49 Code of Federal Regulations (CFR) 172.800(b)(4) to meet the requirements of 49 CFR 172.802(a)(1-3).

2.1 General Security

Employees must meet general project security requirements to perform duties in accordance with the *Moab UMTRA Project Site Security Plan* (DOE-EM/GJ1532).

2.1.1 Personnel Security

Project employees are under a comprehensive security program that conforms to requirements promulgated by the Atomic Energy Act of 1954 and is in place at DOE facilities. With regard to personnel security, compliance with the *Moab UMTRA Project Site Security Plan* (DOE-EM/GJ1532) is considered to satisfy the requirements in 49 CFR 172 (Subpart I) as permitted by section 172.804.

2.1.2 Facility Security

The DOE has implemented safeguards and security programs as described in DOE Order (DOE O) 470.1, DOE Manual (DOE M) 470.4-1, DOE O 472.1B, and DOE M 472.1-1B. These programs are designed to ensure appropriate levels of protection against unauthorized access, theft, diversion, loss of custody, destruction, espionage, and other hostile acts that may cause unacceptable adverse impacts on RRM or on the health and safety of DOE, contractors, the public, or the environment.

DOE's safeguards and security programs (DOE O 471.1 and DOE O 472.1B) cover DOE sites. With regard to site security and safeguarding access to hazardous materials, these DOE programs are considered to satisfy the requirements of 49 CFR 172, Subpart I, as permitted by Section 172.804.

2.1.2.1 Access Badges

Access to DOE sites is restricted to authorized personnel only. DOE security badges and Local Site Specific Only badges are issued to and worn by personnel who have been granted authorization for access in accordance with the requirements provided in Section 10.1 of the *Moab UMTRA Project Site Security Plan* (DOE-EM/GJ1532). Only approved personnel shall participate in project loading, shipping, and off-loading activities.

2.1.2.2 RRM Storage

Containers with RRM are anticipated for transport on the day they are loaded. In the event same day shipment is not practicable, containers are staged in the Moab site Support Area where security personnel maintain visual observation until the containers are shipped.

2.1.2.3 Security Incidents

Incidents involving a violation of security policies or procedures are investigated by the RAC, the TAC Security Officer, and DOE. Incidents where criminal activity is indicated are forwarded to the Grand County, Utah, Sheriff's Office for investigation.

2.2 Training

Employees involved with the shipping, transportation, or receiving of RRM will receive security awareness training on the contents of this security plan, including requirements of 49 CFR 172.700, and training on the requirements and conditions of the DOT Special Permit 14283. This training is conducted in briefing format and documented by employee signature.

Title 49 CFR 172 Subpart H, requires employers to provide training for their hazmat employees. Security training is specifically referenced in 172.704 (a)(4) and (5) and requires that employees receive training to enhance security of hazmat shipments. The level of security training required for a hazmat employee is determined by the function performed and how that function relates to transportation security. Security training and employee functions are described below. For the Moab UMTRA Project, each new hazmat employee will receive Security Awareness training within 90 days after employment, and hazmat employees will receive recurrent security training at least once every 3 years.

Each hazmat employee specifically affected by this plan will be trained and tested in the following topics:

- Contractor security objectives
- Specific security procedures
- Employee responsibilities
- Actions to take in the event of a security breach
- Organizational security structure

This training is divided into two functional areas as follows:

Security Training for Rail Transport Personnel and Truck Drivers: Includes instruction in sections of the plan that pertain to personnel involved in transporting RRM from the Moab tailings pile to the Crescent Junction disposal cell.

Security Training for Shippers: Includes a comprehensive understanding of the plan and its implementation and details the responsibilities of operations personnel who will be shipping RRM.

Table 1. Transportation Security Training Matrix

Job Function	Security Awareness Training	Security Training for Rail Transport Personnel and Drivers	Security Training for Shippers
Hazmat Employee: Package, mark, label, load, and handle hazardous material	X		
Hazmat Employee: Determine appropriate packaging and communications; creates shipping papers but does not sign.	X		
Transporter: Operates rail or motor vehicle carrying RRM.	X	X	
Supervisors: Responsible for drivers who operate motor vehicle carrying hazardous material requiring placards	X	X	
Shippers: Responsible for RRM shipments	X		X
Supervisors: Responsible for shippers conducting RRM shipments	X		X

2.3 Risk Assessment

The project performed an assessment of RRM transport off the project site. The assessment includes general scenarios including theft and sabotage. There are no significant threats or vulnerabilities. However, specific conclusions include:

- RRM shipments contain such small amounts of radioactive contaminated material that there is a low risk and low consequence to any personnel exposure to the material.
- RRM shipments are in large containers that pose a low risk for unplanned removal or theft from the site. Additionally, RRM is a soil-like material that poses low risk and low consequence security risks if any is removed from the site.
- Hazardous materials (i.e. asbestos containing materials) or debris that may be included in RRM shipments may be loaded directly into dump trucks for transportation from Moab to the disposal cell. These trucks pose a low risk and low consequence threat as they will either be transported the day they are loaded or will be maintained under security observation.

2.4 Transportation Operations

The following activities will be performed by RRM transporters:

- Transporter employees subject to this plan will be briefed on the plan prior to performing work.
- Shipping documentation will accompany each shipment in accordance with the *Transportation Plan* (DOE-EM/GJ1639). Documentation will include container identification, container contents, date loaded on the conveyance, date shipped, date received, and date unloaded from conveyance.
- Ensure verbal communications (e.g. cell phone, two-way radio) are maintained by the transporter and security personnel.

- Notify project security personnel when leaving the origination point (either Moab or Crescent Junction sites) and when arriving at the destination (Moab or Crescent Junction sites).
- Use only approved transportation routes.
 - Rail shipments directly between the Emkay siding in Moab and the site siding in Crescent Junction on the rail line.
 - Truck shipments directly from the Moab site Support Area or vicinity property to the Crescent Junction disposal cell site.
- Do not stop between locations.
- Do not discuss cargo, route, or destination with nonproject personnel.
- Immediately report any emergencies, delays in transit, or unusual situations to project security personnel. Project security personnel will notify the RAC Operations Manager of any of these instances within 15 minutes of notification by the carrier.
- Submit completed shipping documentation to the RAC Operations Manager within one working day of arrival at the destination.

2.5 Enroute Transportation Security

The following activities will be performed by the operations organization to ensure that appropriate security measures are undertaken prior to shipment or receipt of materials.

Rail Shipments

- Identify rail carrier employees through badging or other approved Union Pacific identification
- Ensure all transporters of materials subject to this plan are briefed and sign applicable briefing form in Attachment A
- Verify material received with shipping documents before unloading, when applicable
- Trace and confirm delivery of RRM shipments subject to the plan

Truck Shipments

- Identify driver's name through carrier dispatch to allow photo verification
- Verify that the driver has federal or state government-issued commercial drivers license (CDL) with applicable endorsements inclusive of Transportation Security Administration requirements
- Ensure all transporters of materials subject to this plan are briefed and sign applicable briefing form in Attachment B
- Verify material received with shipping documents before unloading, when applicable
- Trace and confirm delivery of RRM shipments subject to the plan

Shipping containers are to remain closed during transport between the Moab and Crescent Junction sites.

2.6 Security Breaches

All significant security breaches, which pose an apparent imminent danger to the project, its employees, the environment, equipment, facilities, or cargo, will be reported to the Operations Manager immediately.

Significant security breaches include:

- Any apparent or actual attack on shipments
- Any incident involving actual or attempted hijacking of shipments
- Any deliberate act aimed at stopping the transportation conveyance or to cause an accident
- Any incident involving the use or threatened use of weapons of any kind
- Any discovery of sabotage or attempted sabotage of any shipment, equipment, or security system
- Unauthorized noncompany personnel found in or attempting to enter areas involving RRM operations
- Any loss, theft, or compromise of RRM
- Observations of apparent or suspected terrorist acts

The Operations Manager will notify security, local responders, and DOE as appropriate.

3.0 Records

This *Transportation Security Plan* (DOE-EM/GJ1768) is a controlled document. All copies of the completed security plan are considered sensitive information and should be treated accordingly.

This plan will be retained for the duration of RRM shipments. Copies of the plan will be available to employees who are responsible for implementing it, consistent with personnel security clearance or background investigation restrictions and a demonstrated need to know. The security plan will be revised and updated as necessary to reflect changing circumstances. When the security plan is updated or revised, all copies of the plan will be maintained as of the date of the most recent revision according to the *Records Management Manual* (DOE-EM/GJ1545).

This plan must be certified by the carrier prior to shipping RRM, as included in Attachment C. The plan will be reviewed at least annually and self-assessments conducted periodically.

4.0 References

49 CFR 172, Subpart H – Training.

49 CFR 172, Subpart I – Security Plans.

49 CFR 383.141, Subpart I – Requirement for Transportation Security Administration Approval of Hazardous Materials Endorsement Issuances.

DOE *Moab UMTRA Project Records Management Manual* (DOE-EM/GJ1545), U.S. Department of Energy, Grand Junction, Colorado, April 2008.

DOE *Moab UMTRA Project Site Security Plan* (DOE-EM/GJ1532), U.S. Department of Energy, Grand Junction, Colorado, February 2008.

DOE *Moab UMTRA Project Transportation Plan* (DOE-EM/GJ1639), U.S. Department of Energy, Grand Junction, Colorado, January 2009.

U. S. Department of Transportation Special Permit DOT-SP 14283, February 2008.

Attachment A

Security Action Plan Briefing Rail Carriers

Shipper:

- Identify rail carrier employees through badging or other approved Union Pacific identification.
- Ensure all transporters of materials subject to this plan are briefed and sign applicable briefing form herein.
- Verify material received with shipping documents before unloading, when applicable.
- Trace and confirm delivery of RRM shipments subject to the plan.

Transporter:

- Use only approved transportation routes. Operate train and cars, with either full or empty containers, directly between the Emkay siding in Moab and the Brendel siding in Crescent Junction.
- Do not stop between locations.
- Do not discuss cargo, route, or destination with nonproject personnel.
- Report any emergencies, delays in transit, or unusual situations to Moab UMTRA Project security personnel, who will notify the Operations Manager.
- Ensure verbal communications (e.g. cell phone, two-way radio) are maintained between you and security personnel.

The undersigned has read and understands these Hazardous Material Shipment Security Actions.

Carrier

Engineer/Conductor Name (Print)

Signature of Engineer/Conductor

Briefer Name (Print)

Signature of Briefer

Attachment B

Security Action Plan Briefing Truck Drivers

Shipper:

- Identify driver's name through carrier dispatch in order to allow photo verification.
- Verify that the driver has federal or state government-issued CDL with hazmat endorsement.
- Ensure all transporters of materials subject to this plan are briefed and sign applicable briefing form herein.
- Verify material received with shipping documents before unloading, when applicable.
- Trace and confirm delivery of RRM shipments subject to the plan.

Drivers:

- Use only approved transportation routes. Drive shipments directly from the Moab Support Area to the Crescent Junction disposal cell site by exiting the site onto State Route 279 and turning west on US 191.
- Do not stop between locations.
- Do not discuss cargo, route, or destination with nonproject personnel.
- Report any emergencies, delays in transit, or unusual situations to Moab UMTRA Project security personnel, who will notify the Operations Manager.
- Ensure verbal communications (e.g. cell phone, two-way radio) are maintained between the driver and project security personnel.

The undersigned has read and understands these Hazardous Material Shipment Security Actions.

Carrier

Driver Name (Print)

Signature of Driver

Briefer Name (Print)

Signature of Briefer

Attachment C

Certification of Transportation Security Plan

The undersigned certifies that a review of the *Transportation Security Plan* (DOE-EM/GJ1768) was performed, and the regulatory requirements of 49 CFR 172.800 and 172.802 have been developed. This plan is in effect for shipments of residual radioactive material on behalf of the Department of Energy.

Signed: _____

Title: _____

Carrier Name and Address:

Date:
